1	RACHELE R. RICKERT (190634)						
1	rickert@whafh.com						
2	MARISA C. LIVESAY (223247)						
	livesay@whafh.com WOLF HALDENSTEIN ADLER						
3	FREEMAN & HERZ LLP						
4	750 B Street, Suite 2770						
4	San Diego, CA 92101						
5	Telephone: 619/239-4599						
	Facsimile: 619/234-4599						
6							
_	GREGORY M. NESPOLE						
7	gmn@whafh.com						
8	JANINE L. POLLACK pollack@whafh.com						
0	RANDALL S. NEWMAN (190547)						
9	newman@whafh.com						
	KATE M. McGUIRE						
10	mcguire@whafh.com						
11	WOLF HALDENSTEIN ADLER						
11	FREEMAN & HERZ LLP						
12	270 Madison Avenue						
	New York, NY 10016						
13	Telephone: 212/545-4600 Facsimile: 212/545-4677						
	Facsinine. 212/343-4077						
14	Counsel for Plaintiffs						
15							
13	UNITED S	TATES DISTRICT COURT					
16							
	FOR THE NORTHERN DISTRICT OF CALIFORNIA						
17							
18	SA	N JOSE DIVISION					
10	ANTHONY BARTING	CAGENIO					
19	ANTHONY BARTLING and	) CASE NO.					
	JACQUELINE N. OLSON, on behalf	)					
20	of themselves and all others similarly	)					
21	situated,	)					
21		) CLASS ACTION COMPLAINT					
22	Plaintiff,	)					
		)					
23	v.	) <b>DEMAND FOR JURY TRIAL</b>					
ا ۵		)					
24	APPLE INC.,	)					
25							
	Defendant.						
26		-					
<u>,                                    </u>							
27							
<u>,</u>							

13

16 17

19

21

23

24

25

26

27 28

Plaintiffs Anthony Bartling and Jacqueline N. Olson ("Plaintiffs"), for their class action complaint, allege upon personal knowledge as to themselves and their own actions, and upon information and belief, including the investigation of counsel, as to all other matters as follows:

## NATURE OF ACTION

- 1. Plaintiffs assert this class action against Defendant Apple Inc. ("Apple" or "Defendant") on behalf of all persons who purchased or leased a product containing a processor designed by Apple with ARM based architecture (the "Apple Processor"), as a component of another Apple product. Apple Processors can be found in iPhones, iPads and the Apple TV (cumulatively "iDevices").
- 2. Apple Processers are, in effect, the "brains" of iDevices. They handle the execution of instructions given by software programs. Given the vast number of instructions involved in virtually every program, processor speed is highly significant to consumers. In addition, given that consumers often store sensitive information such as passwords on their iDevices, processor security is equally important.
- 3. Unfortunately, all Apple Processors are defective because they were designed by Defendant Apple in a way that allows hackers and malicious programs potential access to highly secure information stored on iDevices. The Apple Processors expose users to at least two types of security risks (the "Security Vulnerabilities"), based on two hacking techniques, which have been dubbed "Meltdown" and "Spectre" by the technology community. The first hacking technique is known as "Meltdown" because it "melts security boundaries which are normally enforced by the hardware," and the other hacking technique is known as "Spectre" because its root cause is speculative execution, and "because it is not easy to fix, it will haunt us for quite some time."<sup>2</sup>
- 4. To protect themselves from the Meltdown technique, users will have to apply a software patch that will cause a slowdown in the processor speed (the "Slowdown Problem").

The Apple Processors include, but are not limited to, A4, A5, A5X, A6, A6X, A7, A8, A8X, A9, A9X, A10 Fusion and A11 Bionic processors.

https://spectreattack.com//#faq-fix (website of Graz University of Technology, among those that discovered the defects).

- 5. There is no complete firmware or software patch for the Spectre risk at this time, and it is not presently known whether any firmware or software patches that could be used to eliminate the risk of the Spectre technique will slow processer speed or by how much. A long term solution to completely eliminate the risk of the Spectre issue may require the development of new hardware and/or architectures.
- 6. In short, Defendant has not been able to offer an effective repair to its customers. A patch that cuts processor performance is not a legitimate solution, nor is any patch that does not fully eliminate the Security Vulnerabilities that can be exploited by the Meltdown or Spectre techniques.
- 7. Based upon information and belief, Defendant has known about the design defect giving rise to the Security Vulnerabilities since at least June, 2017. Defendant has admitted that it released an update to its iOS operating system software to address the Meltdown technique in December, 2017, but Apple knew or should have known of the design defect much earlier and could have disclosed the design defect more promptly. Even after it was aware of the Security Vulnerabilities, Apple continued to sell and distribute iDevices without a repair or having made a disclosure about the Apple Processor Security Vulnerabilities. The iDevices it sold and distributed were not of the quality represented and were not fit for their ordinary purposes.
- 8. Plaintiffs would not have purchased the iDevices had they known of the Security Vulnerabilities or they would not have paid the prices they paid for the iDevices (in which the Apples Processors were a component) had they known that they would be subject to the Security Vulnerabilities as well as a slowdown in speed and thus decrease in quality and value. Plaintiffs have suffered an ascertainable injury and a loss of money or property as a result of Defendant's wrongdoing.

### **THE PARTIES**

9. Plaintiff Anthony Bartling is an individual residing in Milford, New Hampshire who, in or about October, 2016, purchased two iPhone 6s Plus phones which contained Apple A9 processors. In or about December, 2017, Plaintiff Bartling upgraded one of the iPhone 6s phones for an iPhone 8 Plus which contains an Apple A11 Bionic processor. The Apple Processors in his

iPhones have been exposed to the Security Vulnerabilities described herein and will be impacted by the Slowdown Problem.

- 10. Plaintiff Jacqueline N. Olson is an individual residing in Locust Valley, New York who, in or about September, 2017, purchased an iPhone 7 which contains an A10 Fusion processor. The Apple Processor in her iPhone 7 has been exposed to the Security Vulnerabilities described herein and will be impacted by the Slowdown Problem.
- 11. Defendant Apple is a California corporation with its principal place of business located at 1 Infinite Loop, Cupertino, California 95014. Apple regularly conducts and transacts business in this District as well as throughout the United States. Apple designed the Apple Processors used in iDevices.

### JURISDICTION AND VENUE

- 12. This Court has jurisdiction over this action under the Class Action Fairness Act, 28 U.S.C. § 1332(d). There are at least 100 members in the proposed class, the aggregated claims of the individual class members exceed the sum or value of \$5,000,000, exclusive of interest and costs, and this is a class action in which Defendant Apple and members of the proposed plaintiff classes, including the named Plaintiffs, are citizens of different states.
- 13. Venue is proper in this District pursuant to 28 U.S.C. § 1391 because Apple has its principal place of business in this District, a substantial part of the events or omissions giving rise to Plaintiffs' claims occurred here, and Apple is a corporation subject to personal jurisdiction in this District and, therefore, resides here for venue purposes.

## FACTUAL ALLEGATIONS

- 14. Defendant Apple is one of the world's largest manufacturers of mobile telephones and tablet devices, and has been selling and distributing the iDevices incorporating the defective Apple Processors for more than 10 years. Apple has sold millions of iDevices containing Apple Processors, which it designed using architecture licensed from ARM Holdings PLC and which it manufactured or had manufactured by third-parties in accordance with its designs.
- 15. On January 2, 2018, it was publicly reported that "a fundamental design flaw in Intel's processor chips has forced a significant redesign of the Linux and windows kernels to

defang the chip-level security bug." John Leyden & Chris Williams, *Kernel-memory-leaking Intel processor design flaw forces Linux, Windows redesign*, THE REGISTER, January 2, 2018.<sup>3</sup>

- 16. On January 4, 2018, it was widely reported that the design defect exposed users to two security vulnerabilities, called "Meltdown" and "Spectre," respectively, both of which exposed users to significant security risks and for neither of which was there a reasonable and adequate solution. Cade Metz & Nicole Perlroth, *Researchers Discover Two Major Flaws in the World's Computers*, N.Y. TIMES, January 4, 2018.
- 17. On January 4, 2018, Apple announced that all Apple Processors were vulnerable to the Meltdown and Spectre techniques.
- 18. The Meltdown and Spectre techniques allow hackers to take advantage of a modern computer processor (or "CPU") performance feature, called speculative execution. Speculative execution attempts to improve speed by executing multiple instructions at once (or even in a different order than when entering the CPU). To increase performance, the CPU *predicts* which path of a branch is most likely to be taken, and will speculatively continue execution down that path even before the branch is completed. If the prediction is wrong, speculative execution is rolled back in a way that is intended to be invisible to software.
- 19. The design flaw exposes the processor's kernel to vulnerability. A kernel is the most vital software component of a computer, which serves as a go between among programs and computer components, such as the processor and the memory. One of the kernel's main tasks is to prevent data in one program from being read by another when it should not.
- 20. The Meltdown and Spectre techniques allow hackers to abuse speculative execution to access privileged memory including that of the kernel from a less-privileged user process (such as a malicious application running) on the device.
- 21. Because of the newly-disclosed Security Vulnerabilities, it is possible for hackers to use malicious software to gain access to sensitive data that is supposed to be protected by the

https://www.theregister.co.uk/2018/01/02/intel\_cpu\_design\_flaw/ (last visited January 4, 2018).

kernel, such as passwords, social security numbers, credit card and banking information, and photographs. Significantly, unlike ordinary malware, which runs like applications, hackers exploiting these kernel defects cannot be seen by antivirus software.<sup>4</sup>

As detailed below, the firmware and software patches to protect against the Meltdown and Spectre techniques are wholly inadequate to eliminate the Security Vulnerabilities that exist as a result of the defect in Apple Processors. The firmware and software "fixes" for the Meltdown technique are expected to reduce processor speed by between 5 and 30%, with some sources predicting the possibility of an even greater slowdown. There is no complete firmware or software patch to fully protect against the Spectre technique at this time, and it is not clear whether any of the patches necessary to fix Spectre will slow processers.

## **The Defective Apple Processor's Security Vulnerabilities:**

## The "Meltdown" Technique:

- 23. Meltdown is the name given to an exploitation technique known as CVE-2017-5754 or "rogue data cache load."
- 24. The Meltdown technique can enable a user process to read kernel memory, and Apple admitted that its analysis suggests that it has the most potential to be exploited.
- 25. Apple claims it recently released updates for iDevices to protect against the Meltdown technique without affecting the speed of the devices.
- 26. However, Apple provided no details regarding what iDevices it tested or how those tests were conducted, and experts claim that processor slowdown is unavoidable given the way the Meltdown patch works.

## **The "Spectre" Techniques:**

27. Spectre is a name covering two different exploitation techniques known as CVE-2017-5753 or "bounds check bypass," and CVE-2017-5715 or "branch target injection." These

http://nymag.com/selectall/2018/01/intel-chip-security-flaw-meltdown-spectre-what-to-know-explainer.html (last visited January 8, 2018).

- 6 -

techniques potentially make items in kernel memory available to user processes by taking advantage of a delay in the time it may take the CPU to check the validity of a memory access call.

- 28. Although Apple claims that the Spectre techniques are difficult to exploit, even by an application running locally on an iDevice, Apple did not disclose the likelihood of a successful Spectre attack or how a user could prevent against such an attack. Apple did admit that the Spectre techniques could be exploited in JavaScript running in a web browser and that it would release an update for Safari on iOS to *mitigate* the Spectre exploitation techniques. Apple's statement suggests that it cannot completely eliminate the Spectre exploitation techniques.
- 29. As with Meltdown, it is unlikely that an antivirus program will detect attacks using the Spectre techniques.

## **Apple's Knowledge of the Security Vulnerabilites:**

30. Based upon information and belief, Apple has long known of the Security Vulnerabilities, but has done nothing about them until recently. On January 4, 2018, *Morningstar* reported, in an article titled, "Intel Struggled With Securities Flaws for Months," that:

On June 1 last year, a member of Google's Project Zero security team notified Intel and other chip makers of the vulnerabilities. Even with the lead time, Intel and others are still trying to plug the security gaps. One issue is getting security updates to billions of devices. Another is that some security patches could slow performance, as the flaws affect chip features designed to speed up processors.<sup>5</sup>

- 31. ARM Holdings PLC, the company that licenses the ARM architecture to Apple, admits that it was notified of the Security Vulnerabilities in June, 2017 by Google's Project Zero and that it immediately notified its architecture licensees (presumably, including Apple) who create their own processor designs of the Security Vulnerabilities.
- 32. In fact, Apple either knew, or should have known, of the Security Vulnerabilities at least throughout the Class Period (defined below). Had Apple been performing proper tests and security checks of its Apple Processors, the Security Vulnerabilities would have been evident. No fewer than three independent teams working separately (teams from Google Project Zero, Cyberus

http://news.morningstar.com/all/dow-jones/us-markets/201801049039/intel-wrestled-with-chip-flaws-for-months.aspx (last visited January 4, 2018).

Technology, and the Graz University of Technology) were able to discover Meltdown, and two independent teams (from Google Project Zero and a group of universities) were able to discover Spectre.<sup>6</sup> Apple, with its access to proprietary information, was in a much better position to discover the Security Vulnerabilities than independent researchers. And, as the iDevices containing the defective Apple Processors were at the center of its business, it had both the obligation and motivation to do so.

- 33. Nonetheless, Apple has continued and continues to sell iDevices containing the defective Apple Processors to this day. As a result, Plaintiffs and Class members have been needlessly harmed.
- 34. The position in which this leaves consumers is clear. They have iDevices using Apple Processors that are slower and more vulnerable to attacks by hackers than what consumers bargained for. They have iDevices incorporating Apple Processors that are not adequate for their ordinary purpose. Plaintiffs and other Class members would not have purchased iDevices, or would not have paid as much for them, had they known the truth about the Security Vulnerabilities to the Apple Processors.

## CLASS ALLEGATIONS

- 35. Plaintiffs bring this action as a class action on behalf of themselves and all others similarly situated for the purpose of asserting claims alleged in this Complaint on a common basis. Plaintiffs' proposed classes are defined under Federal Rules of Civil Procedure 23(b)(2) and (3). Plaintiffs propose to act as representatives of the following Nationwide Class ("Class") comprised of all persons who reside and purchased or leased their iDevices in the United States at any time since 2007 (the "Class Period").<sup>7</sup>
- 36. Plaintiffs also bring this action on behalf of two sub-classes: the New Hampshire Sub-Class, comprised of all Class members who resided in New Hampshire when they purchased

https://spectreattack.com/#faq-fix (last visited January 8, 2108).

Tolling would apply to any applicable statutes of limitations because Plaintiffs and proposed Class members could not have discovered the Security Vulnerabilities until they were disclosed by Apple.

or leased iDevices or who purchased or leased iDevices in New Hampshire; and the New York Sub-Class, comprised of all Class members who resided in New York when they purchased or leased iDevices or who purchased or leased iDevices in New York. (Collectively, the Class and the Sub-Classes are referred to as the "Classes").

- 37. Excluded from the Classes are Apple; any person, firm, trust, corporation, officer, director, or other individual or entity in which Apple has a controlling interest or which is related to or affiliated with Apple; and the legal representatives, agents, affiliates, heirs, successors-in-interest, or assigns of each such excluded party.
- 38. The Classes for whose benefit this action is brought are so numerous and geographically dispersed that joinder of all members is impractical.
- 39. Plaintiffs are unable to state the exact number of members of the Classes without discovery of Apple's records but, on information and belief, allege that the Class members number in the millions.
- 40. Plaintiffs are typical of the members of the Classes in that their claims are based on the exact same facts and legal theories as the claims of all other Class members.
- 41. There are questions of law and fact common to the Classes which predominate over any questions affecting only individual members. The common questions of law and fact affecting the rights of all members of the Classes include the following:
  - a. whether Defendant's Apple Processors are defective;
  - b. whether Defendant's Apple Processors are vulnerable to the Meltdown techniques;
  - c. whether Defendant's Apple Processors are vulnerable to the Spectre techniques;
  - d. whether the remedies to eliminate or mitigate the Meltdown and Spectre techniques slow down Apple Processors;
  - e. whether any slowdown to Apple Processors is material;
  - f. whether the remedies to eliminate or mitigate the Meltdown and Spectre techniques are effective;

1		g. when Defendant knew of the Security Vulnerabilities in the Apple									
2		Processors;									
3	h. whether Defendant violated consumer protection laws by selling or leasing										
4	iDevices containing the defective Apple Processors;										
5	i. whether Defendant breached any warranties in connection with the sale of										
6	lease of the iDevices containing the defective Apple Processors;										
7	j. whether Plaintiffs are entitled to injunctive relief; and										
8		k. the appropriate measure and amount of compensation for Plaintiffs and the									
9		Classes.									
10	42.	Each of these common questions of law and fact is identical for each and every									
11	member of the Classes.										
12	43.	Plaintiffs are members of the Classes they seek to represent, and their claims arise									
13	from the same factual and legal basis as those of the other members of the Classes. Plaintiffs assert										
14	the same legal theories as do all members of the Classes.										
15	44.	Plaintiffs will thoroughly and adequately protect the interests of the Classes, having									
16	obtained qualified and competent legal counsel to represent themselves and those similarly situated										
17	45.	The prosecution of separate actions by individual members of the Classes would									
18	create a risk of inconsistent adjudications and would cause needless expenditure of judicia										
19	resources, and as such prosecution on a Class basis is superior to other methods of adjudication.										
20		<u>COUNT I</u> Breach of Implied Warranty									
21	Breach of Implied Warranty (Individually and on Behalf of the Classes)										
22	46.	Plaintiffs incorporate by reference paragraphs 1 through 45 above as if fully set forth									
23	herein.										
24	47.	This claim is asserted on behalf of Plaintiffs and the Classes.									
25	48.	Defendant is a "merchant" and the iDevices are "goods" as defined under the									
26	Uniform Commercial Code.										
27											
28											
I											

- 49. Pursuant to U.C.C. § 2-314, an implied warranty that goods are merchantable is implied in every contract for a sale of goods. Defendant impliedly warranted that the iDevices were of a merchantable quality.
- 50. Defendant breached the implied warranty of merchantability because the iDevices contain defective Apple Processors and were and are not of a merchantable quality due to the Security Vulnerabilities and the associated problems and failures in the Apple Processors caused by the Security Vulnerabilities.
- 51. Plaintiffs' and each Class member's interactions with Defendant suffice to create privity of contract between Plaintiffs and all other members of the Classes, on the one hand, and Defendant, on the other hand; however, privity of contract need not be established nor is it required because Plaintiffs and the absent Class members are intended third-party beneficiaries of contracts between Defendant and its resellers, authorized dealers, and, specifically, of Defendant's implied warranties.
- 52. Defendant's resellers, dealers, and distributors are intermediaries between Defendant and consumers. These intermediaries sell iDevices containing Apple Processors to consumers and are not, themselves, consumers of Apple Processors, and therefore have no rights against Defendant with respect to Plaintiffs' and all other Class members' purchases of iDevices. Defendant's warranties were designed to influence consumers who purchased iDevices.

## COUNT II

## Breach of Express Warranty (On Behalf of Plaintiffs and the Classes)

- 53. Plaintiffs incorporate by reference paragraphs 1 through 45 above as if fully set forth herein.
  - 54. This claim is asserted individually and on behalf of Plaintiffs and the Classes.
- 55. Pursuant to U.C.C. § 2-313, an affirmation of fact, promise, or description made by the seller to the buyer which relates to the goods and becomes a part of the basis of the bargain creates an express warranty that the goods will conform to the affirmation, promise, or description.
- 56. Defendant is a "merchant" and the iDevices are "goods" within the meaning of the U.C.C.

- 57. Defendant markets iDevices touting the increase in speed in its latest Apple processor. After implementation of a patch necessary to protect against the Security Vulnerabilities, the speed increases are not as represented.
- 58. Plaintiffs and other Class members are the intended recipients of Apple's express warranties about the quality and nature of the iDevices containing the Apple Processors, including the speed and security of those iDevices. Plaintiffs and the other Class members are also intended third-party beneficiaries of contracts between Defendant and its resellers, authorized dealers, and specifically, of Defendant's express warranties.
- 59. As a direct and proximate result of Defendant's breach of express warranties, Plaintiffs and all other Class members have suffered damages, injury in fact, and ascertainable loss in an amount to be determined at trial, including but not limited to repair and replacement costs, monetary losses associated with the slow processor speed, diminished value of their iDevices, and loss of use of or access to their iDevices.

## COUNT III

## Negligence (Individually and On Behalf of the Classes)

- 60. Plaintiffs incorporate by reference paragraphs 1 through 45 above as if fully set forth herein.
  - 61. This claim is asserted individually and on behalf of Plaintiffs and the Classes.
- 62. Defendant Apple owed a duty of care to Plaintiffs and Class members, arising from the sensitivity of the information stored on iDevices and the foreseeability of the Apple Processor's data safety shortcomings resulting in an intrusion, to exercise reasonable care in safeguarding sensitive personal information. It also had a duty of care to ensure that Apple Processors would function at the quality and speed levels it represented. This duty included, among other things, designing, maintaining, monitoring, and testing its processors, to ensure that Class members' data and computers were adequately secured and that the processors would function as promised.
- 63. Defendant Apple owed a duty to Class members to implement processes that would detect a major defect in a timely manner.

- 64. Defendant Apple also owed a duty to timely disclose the material fact that Apple Processors were defective and were subject to the Security Vulnerabilities.
- 65. But for Apple's breach of its duties, Class members would not have purchased the iDevices containing the defective Apple Processors, or would not have paid as much for them as they did, and would not have been exposed to security risks and processor slowdowns.
- 66. Plaintiffs and all other Class members were foreseeable victims of Defendant's wrongdoing. Apple knew or should have known that Apple Processors would cause damages to Class members.
- 67. The damages to Plaintiffs and the Class members were a proximate, reasonably foreseeable result of Defendant's breaches of its duties.
- 68. Therefore, Plaintiffs and Class members are entitled to damages in an amount to be proven at trial.

# COUNT IV Unjust Enrichment (Individually and on Behalf of the Classes)

- 69. Plaintiffs incorporate by reference paragraphs 1 through 45 above as if fully set forth herein.
  - 70. This claim is asserted individually and on behalf of Plaintiffs and the Classes.
  - 71. Plaintiffs make this claim in the alternative to the warranty claims set forth above.
- 72. As a result of Defendant's material deceptive advertising, marketing and/or sale of its iDevices, Defendant was enriched at the expense of Plaintiffs and all other Nationwide Class members through their purchase of the iDevices, because the iDevices did not provide the benefits as represented.
- 73. There is privity between Defendant on the one hand and Plaintiffs and all other members of the Classes on the other hand because Defendant intended that purchasers of its iDevices would be consumers, like Plaintiffs and the Class members.
- 74. Under the circumstances, it would be against equity and good conscience to permit Defendant to retain the ill-gotten benefits it received from Plaintiffs and the Class as the result of its

unfair and deceptive practices. Thus, it would be unjust or inequitable for Defendant to retain the benefit without restitution to Plaintiffs and the other members of the Classes.

#### **COUNT V**

## Violations of New Hampshire's Consumer Protection Act, N.H. Rev. Stat. Ann. § 358-A, et seq. (Plaintiff Bartling, Individually and on behalf of the proposed New Hampshire Sub-Class)

- 75. Plaintiffs incorporate by reference paragraphs 1 through 45 above as if fully set forth herein.
- 76. Apple has represented to Plaintiff Bartling and members of the New Hampshire Sub-Class that its iDevices contain Apple Processors that have characteristics, uses, and benefits that they do not have, in violation of RSA § 358-A:2(V).
- 77. Apple has also represented to Plaintiff Bartling and members of the New Hampshire Sub-Class that its iDevices contained Apple Processors that were of a particular standard, quality or grade which they were not, in violation of RSA § 358- A:2(VII).
- 78. In addition, Plaintiff Bartling and the New Hampshire Sub-Class members have suffered injury in fact and lost money or property as a result of unfair competition and deceptive acts by Apple, as Plaintiff and the New Hampshire Sub-Class members purchased iDevices containing Apple Processors which they otherwise would not have been purchased, or paid more for the iDevices than they would have paid if Apple had not made misrepresentations and/or concealed or omitted material information about the quality and characteristics of the Apple Processors, including the processors' speed and security.
- 79. Plaintiff Bartling and the New Hampshire Sub-Class members relied upon Apple to disclose all pertinent information about the Apple Processors.
- 80. The actions of Apple, as complained of herein, constitute unfair and deceptive practices committed in violation of the New Hampshire Consumer Protection Act.
- 81. Plaintiff Bartling and the New Hampshire Sub-Class members have suffered damages as a result of the conduct of Apple, because Plaintiff and the New Hampshire Sub-Class

members were misled into purchasing iDevices which were not what Apple represented them to be or paying more for the iDevices containing Apple Processors than they otherwise would have.

- 82. Apple was aware, or by the exercise of reasonable care should have been aware, that the representations detailed herein were untrue or misleading. Apple was also aware, or by the exercise of reasonable care should have been aware, that the concealments and omissions detailed herein should have been timely disclosed to consumers. Apple was also aware, or by the exercise of reasonable care should have been aware, that it was engaging in unfair or deceptive acts or practices.
- 83. Plaintiff Bartling and the members of the New Hampshire Sub-Class have each been directly and proximately injured by the conduct of the Defendant, including by overpaying for the iDevices containing Apple Processors that they would not otherwise have purchased, being exposed to security and processer slow down risks.
- 84. As a result of the conduct of Apple, as alleged herein, Plaintiff Bartling and the New Hampshire Sub-Class should be awarded actual damages, restitution, and punitive damages pursuant to N.H. Rev. Stat. Ann. § 358-A:10(I), and any other relief the Court deems appropriate.

# Violation of New York General Business Law § 349 (Plaintiff Olson, Individually and on behalf of the New York Sub-Class)

- 85. Plaintiffs incorporate by reference paragraphs 1 through 45 above as if set forth fully herein.
- 86. New York General Business Law ("GBL") § 349(a) provides that "deceptive acts or practices in the conduct of any business, trade or commerce or in the furnishing of any service in this state are hereby declared unlawful."
- 87. The conduct of Defendant alleged herein violates GBL § 349 in that Defendant engaged in the unfair and deceptive practices described herein, which included representing to the consuming public, including Plaintiff Olson and the New York Sub-Class, that Apple Processors

- 15 -

have certain speeds and characteristics that they do not, and failing to disclose that the Apple Processors were defective exposing them to the Security Vulnerabilities and slow-down risks.

- 88. Defendant's acts and practices described above are likely to mislead a reasonable consumer acting reasonably under the circumstances.
- 89. Defendant has willfully and knowingly violated GBL § 349 because, in order to increase its own profits, Defendant intentionally engaged in deceptive and false advertising, misrepresentations and omission of material facts and/or deceptive acts of practices regarding its iDevices and Apple Processors as discussed above.
- 90. As a result of Defendant's deceptive and misleading acts or practices, Plaintiff Olson and the other members of the New York Sub-Class have been injured because they purchased Defendant's iDevices without full disclosure of the material facts discussed above.
- 91. As a result of Defendant's conduct in violation of GBL § 349, Plaintiff Olson and the other members of the New York Sub-Class have been injured as alleged herein in amounts to be proven at trial because if Defendant had disclosed the information discussed above about the defective Apple Processors in the iDevices and otherwise been truthful about their security and slowdown risks, they would not have purchased or paid as much for Defendant's iDevices. As a result, pursuant to GBL § 349, Plaintiff Olson and the New York Sub-Class are entitled to make claims against Defendant for actual or statutory damages to be determined at trial, but for not less than fifty (50) dollars per New York Sub-Class member, such damages to be trebled up to one thousand dollars.
- 92. Additionally, pursuant to GBL § 349, Plaintiff Olson and the New York Sub-Class make claims for attorneys' fees, costs, and injunctive relief requiring Defendant to adequately disclose the omitted information and remedy the Security Vulnerabilities described above.

	REQUESTS FOR RELIEF								
1	WHE	REFORE, Pla	aintiffs respectf	ully request	that the	Court e	nter judgme	nt agains	
2	Defendant Apple as follows:								
3	a.	permanently	enjoining Apple	e from engagi	ng in the	wrongful	conduct con	nplained o	
4		herein;							
5	b.	certifying th	ne Nationwide Cl	lass or, in the	alternati	ve, the Ne	w Hampshir	e and Nev	
6		York Sub-C	Classes as defined	d herein, and	appointii	ng Plaintif	fs and their	Counsel t	
7		represent the	e Nationwide Cl	ass, the New	Hampsh	ire Sub-Cl	ass and the	New Yor	
8		Sub-Class;							
9	c.	awarding ac	ctual damages,	consequential	damage	s, inciden	tal damages	, statutor	
10		damages, pu	unitive damages,	pre- and post-	-judgmer	ıt interest,	litigation ex	penses an	
11   12		court costs in	n an amount to b	e determined	at trial;				
13	d. awarding Plaintiffs and the Classes their reasonable attorneys' fees and costs; a						sts; and		
14	e.	granting suc	h other and furth	er relief as the	e Court n	nay deem j	ust and prop	er.	
15			<b>DEMAND</b>	FOR TRIAL	BY JUR	<u>Y</u>			
16	Plaintiffs hereby demand a trial by jury.								
17	DATED: January 8, 2018			WOLF HALDENSTEIN ADLER FREEMAN & HERZ LLP					
18				RACHELE I MARISA C.	R. RICK	ERT			
19					<u>achele R.</u> HELE R	<i>Rickert</i> . RICKER	T	_	
20				750 B Street	, Suite 2	770			
21				San Diego, C Telephone:					
22				Facsimile:	619/234-	4599			
23				WOLF HAI FREEMA			LER		
24				GREGORY JANINE L.					
25				RANDALL KATE M. M					
26				270 Madisor New York, N	n Avenue	;			
27				Telephone: Facsimile:	212/545-	4600			
28	APPLE CHIP/2436	6		Counsel for					
				- 17 -					